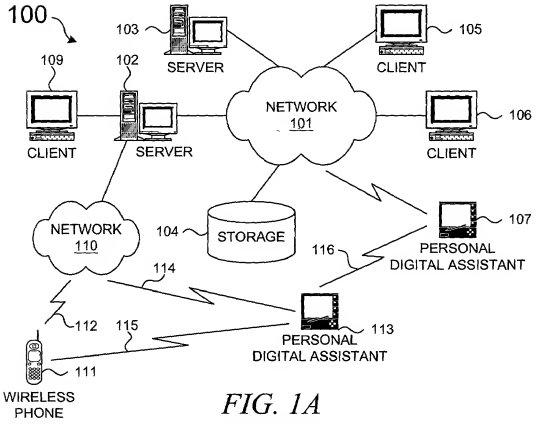


*FIG. 1A*
*(PRIOR ART)*

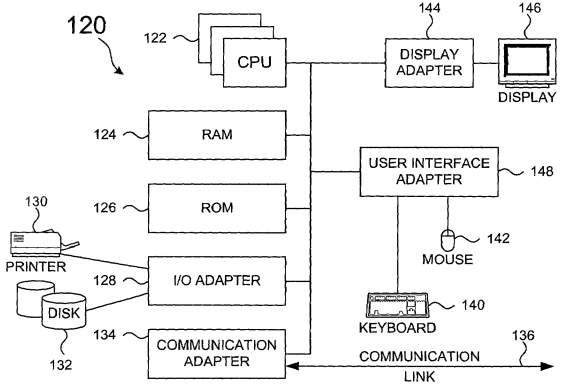


*FIG. 1B*
*(PRIOR ART)*

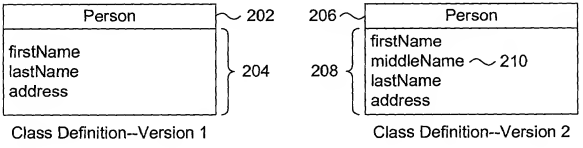


*FIG. 2A*
*(PRIOR ART)*

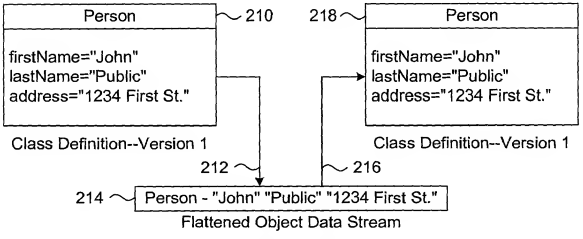


*FIG. 2B*
*(PRIOR ART)*

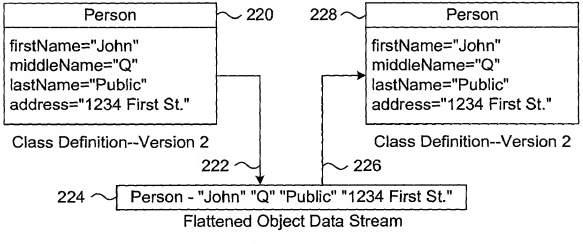


*FIG. 2C*
*(PRIOR ART)*

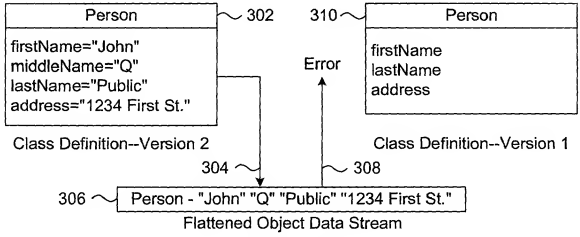


*FIG. 3A*
*(PRIOR ART)*

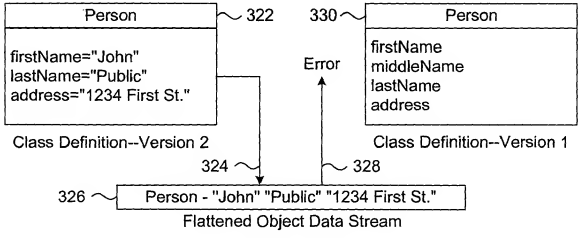


*FIG. 3B*
*(PRIOR ART)*

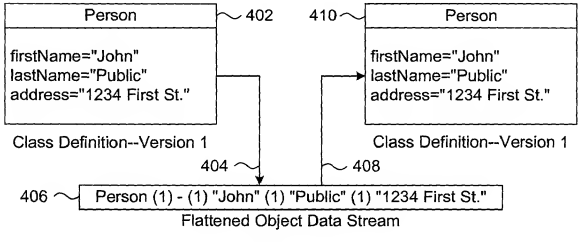


*FIG. 4A*

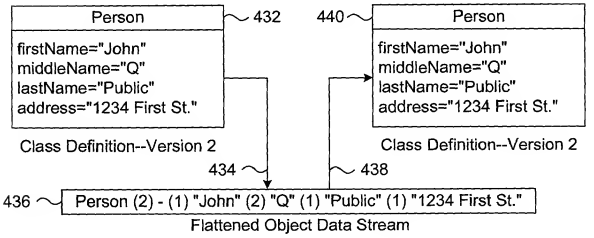


*FIG. 4B*

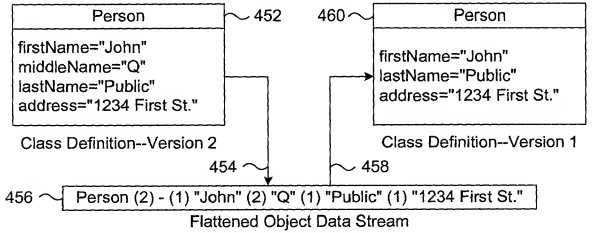


*FIG. 4C*

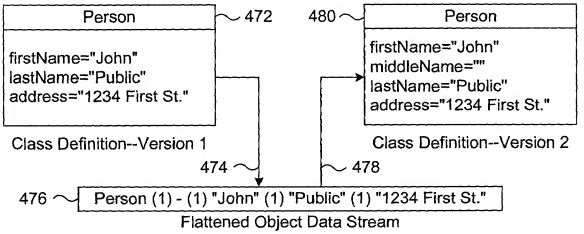


*FIG. 4D*

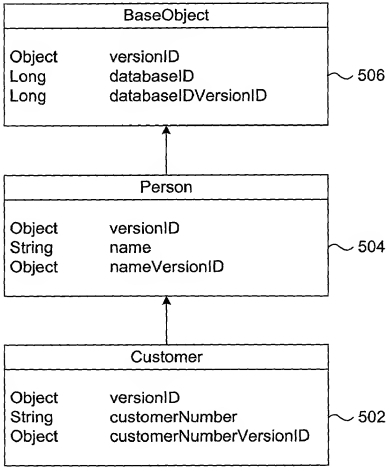
BaseObject
Object versionID
Long databaseID
Long databaseIDVersionID
506
Person
Object versionID
String name
Object nameVersionID
504
Customer
Object versionID
String customerNumber
Object customerNumberVersionID
502

*FIG. 5*

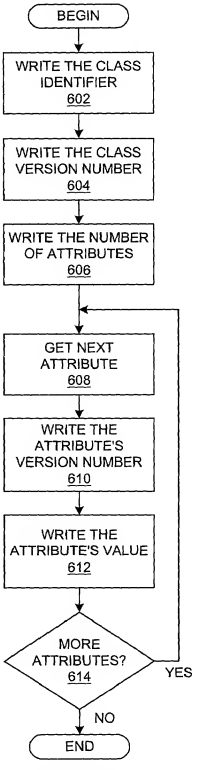
BEGIN
WRITE THE CLASS IDENTIFIER 602
WRITE THE CLASS VERSION NUMBER 604
WRITE THE NUMBER OF ATTRIBUTES 606
GET NEXT ATTRIBUTE 608
WRITE THE ATTRIBUTE'S VERSION NUMBER 610
WRITE THE ATTRIBUTE'S VALUE 612
MORE ATTRIBUTES? 614
YES
NO
END

*FIG. 6A*

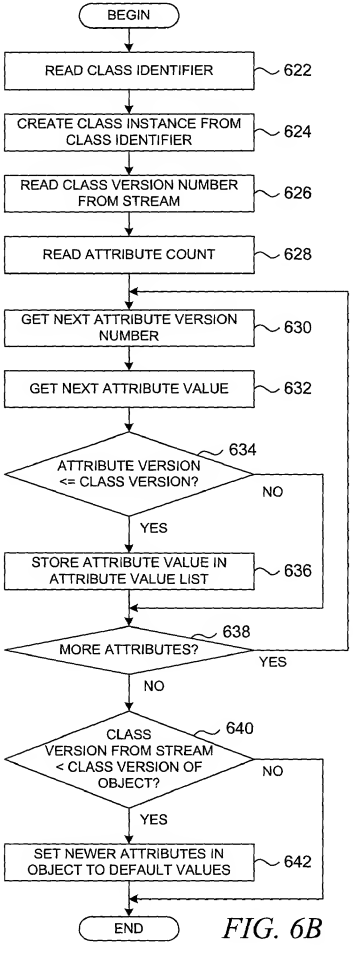
BEGIN
READ CLASS IDENTIFIER
622
CREATE CLASS INSTANCE FROM CLASS IDENTIFIER
624
READ CLASS VERSION NUMBER FROM STREAM
626
READ ATTRIBUTE COUNT
628
GET NEXT ATTRIBUTE VERSION NUMBER
630
GET NEXT ATTRIBUTE VALUE
632
634
ATTRIBUTE VERSION <= CLASS VERSION?
NO
YES
STORE ATTRIBUTE VALUE IN ATTRIBUTE VALUE LIST
636
638
MORE ATTRIBUTES?
YES
NO
640
CLASS VERSION FROM STREAM < CLASS VERSION OF OBJECT?
NO
YES
SET NEWER ATTRIBUTES IN OBJECT TO DEFAULT VALUES
642
END

FIG. 6B

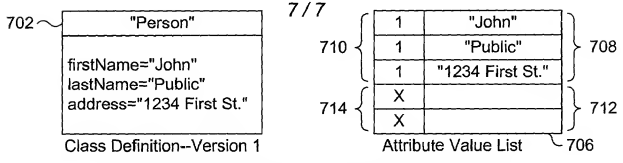


FIG. 7A

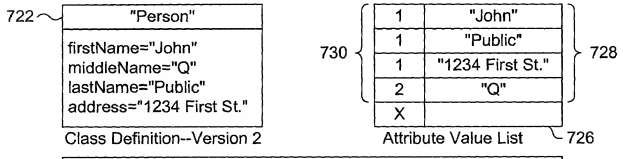


FIG. 7B

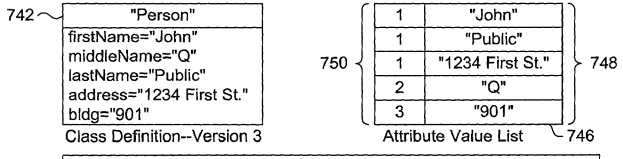


FIG. 7C

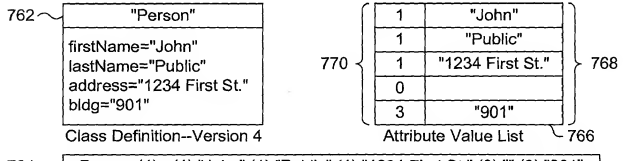


FIG. 7D

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